



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,126	05/09/2001	Brad Lemley	UTL00047	5220

7590 08/26/2004
Kyocera Wireless Corp.
P.O. Box 928289
San Diego, CA 92192-8289

EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
----------	--------------

2686

13

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,126

Applicant(s)

LEMLEY, BRAD

Examiner

Willie J. Daniel, Jr.

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 3 and 16 objected to because of the following informalities:
 - a. Claim 3 (currently amended) on pg. 3, lines 1-2, the applicant has “wherein said wherein the”. The Examiner interprets as “wherein said”.
 - b. Claim 16 (new) on pg. 7, line 8, the applicant ends the limitation with “alphanumeric”. The Examiner interprets the limitation to end as “alphanumeric key”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 6-7, 9, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hao (US 6,437,709 B1) in view of Andre (US 5,950,809).

Regarding **Claim 1**, Hao discloses a mobile handset keypad comprising an array of keys positioned on a surface of a mobile housing for user interface with the mobile (see abstract; col. 5, line 53 - col. 6, line 24; col. 7, lines 4-11; Figs. 4-15), said array of keys comprising:

at least one alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the keyboard illustrates having an alphanumeric key;

at least one integral navigation and alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 4-15). Hao fails to disclose having the feature at least one illumination source proximate to the at least one integral navigation and alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode. However, the examiner maintains that the feature at least one illumination source proximate to the at least one integral navigation and alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode was well known in the art, as taught by Andre.

In the same field of endeavor, Andre discloses the feature at least one polarized light source ('47' - light -emitting diode) which reads on the claimed "illumination source" proximate to the at least one key (23) which reads on the claimed "integral navigation and alphanumeric key", the at least one illumination source (47) configured to illuminate based on the at least one integral navigation and alphanumeric key (23) being in one of a first mode and second mode which reads on the claimed "navigation mode and an alphanumeric mode" (see col. 2, lines 12-32,39-40; col. 2, line 66 - col. 3, line 10; Figs. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao and Andre to have the feature at least one illumination source proximate to the at least one integral navigation and

Art Unit: 2686

alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode, in order to illuminate the keys according to operation mode, as taught by Andre.

Regarding **Claim 2**, the combination of Hao and Andre discloses every limitation claimed, as applied above (see claim 1), in addition Hao further discloses the mobile keypad of claim 1 further comprising a control key which reads on the claimed “toggle key” for toggling between the alphanumeric and the navigation mode (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the control key is a multifunction key to change states between modes.

Regarding **Claim 4**, the combination of Hao and Andre discloses every limitation claimed, as applied above (see claim 1), in addition Hao further discloses wherein said at least one integral navigation and alphanumeric key (see abstract; col. 5, line 53 - col. 6, line 24; Figs. 4-15) comprises:

a first integral navigation and alphanumeric key comprising an up navigation function and an alphanumeric function (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key “2” provides up navigation;

a second integral navigation and alphanumeric key comprising a down navigation function and an alphanumeric function (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key “8” provides down navigation;

a third integral navigation and alphanumeric key comprising a right navigation function and an alphanumeric function (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key “6” provides right navigation;

a fourth integral navigation and alphanumeric key comprising a left navigation function and an alphanumeric function (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key "4" provides left navigation.

Regarding **Claim 6**, Hao discloses a mobile handset (see abstract; col. 5, line 53 - col. 6, line 24; col. 7, lines 4-11; Figs. 4-15) comprising:

a microprocessor and menu display including software routines for creating and displaying a menu (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the display shows characters, numbers, and/or menu according to the action keys in which the microprocessor would be obvious process the function;

a housing including a front face with openings for touch keys and said display and containing said microprocessor (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the housing that has keys and a display which encloses the microprocessor that is obvious to provide the functions of the phone;

a plurality of switches within said housing (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the switches would be obvious to provide the operation of the each key when pressed or actuated.

a keypad within said housing comprising an array of keys projecting through the openings in the front face of said housing, each interacting with one corresponding switch (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the array of keys correspond to a keypad within the housing that interact with switches that are obvious;

the array of keys (see Fig. 4-15) including:

at least one alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the keyboard illustrates having an alphanumeric key;

at least one integral navigation and alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 4-15). Hao fails to disclose having the feature at least one illumination source proximate to the at least one integral navigation and alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode. However, the examiner maintains that the feature at least one illumination source proximate to the at least one integral navigation and alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode was well known in the art, as taught by Andre.

Andre further discloses the feature at least one polarized light source ('47'- light - emitting diode) which reads on the claimed "illumination source" proximate to the at least one key (23) which reads on the claimed "integral navigation and alphanumeric key", the at least one illumination source (47) configured to illuminate based on the at least one integral navigation and alphanumeric key (23) being in one of a first mode and second mode which reads on the claimed "navigation mode and an alphanumeric mode" (see col. 2, lines 12-32,39-40; col. 2, line 66 - col. 3, line 10; Figs. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao and Andre to have the feature at least one illumination source proximate to the at least one integral navigation and

alphanumeric key, the at least one illumination source configured to illuminate based on the at least one integral navigation and alphanumeric key being in one of a navigation mode and an alphanumeric mode, in order to illuminate the keys according to operation mode, as taught by Andre.

Regarding **Claim 7**, the combination of Hao and Andre discloses every limitation claimed, as applied above (see claim 6), in addition Hao further discloses the mobile handset of claim 6 further comprising a toggle key for toggling between the alphanumeric and the navigation mode (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the control key is a multifunction key to change states between modes.

Regarding **Claim 9**, Hao discloses the mobile handset of claim 6 wherein the at least one integral navigation and alphanumeric key further includes symbols which reads on the claimed "indicia" thereon (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the key includes the symbols (e.g., alphanumeric and direction). Hao fails to disclose having the feature the at least one illumination source comprising a backlighting panel illuminating the indicia. However, the examiner maintains that the feature the at least one illumination source comprising a backlighting panel illuminating the indicia was well known in the art, as taught by Andre.

Andre further discloses the feature the at least one illumination source (47) comprising a backlighting film which reads on the claimed "panel" illuminating the indicia (see col. 2, lines 12-32,39-40,50-60; col. 2, line 66 - col. 3, line 10; Figs. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao and Andre to have the feature the at

least one illumination source comprising a backlighting panel illuminating the indicia, in order to illuminate the keys according to operation mode, as taught by Andre.

Regarding **Claim 14**, the combination of Hao and Andre discloses every limitation claimed, as applied above (see claim 6), in addition Hao further discloses additionally comprising a dual function key and associated switch for sending stored dialing information and entering user input when in alphanumeric mode and alternatively selecting menu options when in navigation control mode (see col. 4, lines 21-37; Figs. 4-15), where the “enter key” symbol (i.e., “SEND” key of conventional mobile - see Figs. 2-3 for symbol) provides the function of operation for sending dialing information from a directory or phone list and entering text while in alphanumeric mode and selecting from menu options while in navigation mode for phone operation in which the associated switch and operations would be obvious.

Regarding **Claim 15**, the combination of Hao and Andre discloses every limitation claimed, as applied above (see claim 6), in addition Hao further discloses additionally comprising a dual function key and associated switch for ending a telephone call when in alphanumeric mode and alternatively moving up in the menu hierarchy when in navigation control mode (see col. 6, line 20; Figs. 4-15), where the “clear key” symbol (i.e., “C” key of conventional mobile - see Figs. 2-3 for symbol) provides the function of operation for ending a telephone call while in alphanumeric mode and navigating or moving up to a higher menu while in navigation mode for phone operation in which the associated switch would be obvious.

Regarding **Claim 16**, Hao discloses of the mobile keypad with the features

first integral navigation and alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key "2" provides up navigation and corresponding alphabets;

second integral navigation and alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key "8" provides down navigation and corresponding alphabets;

third integral navigation and alphanumeric (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key "6" provides right navigation and corresponding alphabets;

fourth integral navigation and alphanumeric key (see col. 5, line 53 - col. 6, line 24; Figs. 10-15), where the numeric key "4" provides left navigation and corresponding alphabets.

Hao fails to disclose of the features wherein the at least one illumination source comprises: a first illumination source proximate to the first integral navigation and alphanumeric key; a second illumination source proximate to the second integral navigation and alphanumeric key; a third illumination source proximate to the third integral navigation and alphanumeric; a fourth illumination source proximate to the fourth integral navigation and alphanumeric key. However, the examiner maintains that the features wherein the at least one illumination source comprises: a first illumination source proximate to the first integral navigation and alphanumeric key; a second illumination source proximate to the second integral navigation and alphanumeric key; a third illumination source proximate to the third integral navigation and alphanumeric; a fourth illumination source proximate to the fourth integral navigation and alphanumeric key was well known in the art, as taught by Andre.

Andre further discloses the features wherein the at least one illumination source (47) comprises:

a first illumination source (47) proximate to the first integral key (23 - "numeric 2") (see col. 2, lines 39-40,47-53; col. 2, line 66 - col. 3, line 10; Figs. 1-4);

a second illumination source (47) proximate to the second integral key (23 - "numeric 8") (see col. 2, lines 39-40,47-53; col. 2, line 66 - col. 3, line 10; Figs. 1-4);

a third illumination source (47) proximate to the third integral navigation and alphanumeric (23 - "numeric 6 key") (see col. 2, lines 39-40,47-53; col. 2, line 66 - col. 3, line 10; Figs. 1-4);

a fourth illumination source (47) proximate to the fourth key (23 - "numeric 4") (see col. 2, lines 39-40,47-53; col. 2, line 66 - col. 3, line 10; Figs. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao and Andre to have the features wherein the at least one illumination source comprises: a first illumination source proximate to the first integral navigation and alphanumeric key; a second illumination source proximate to the second integral navigation and alphanumeric key; a third illumination source proximate to the third integral navigation and alphanumeric; a fourth illumination source proximate to the fourth integral navigation and alphanumeric key, in order to illuminate the keys according to operation mode, as taught by Andre.

Claims 3, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hao (US 6,437,709 B1) in view of Andre (US 5,950,809) as applied to claim^{5/4}₆ above, and further in view of Tso et al. (hereinafter Tso) (US 6,157,323).

Regarding **Claim 3**, the combination of Hao and Andre discloses of the feature wherein ~~said wherein~~ the at least one integral navigation and alphanumeric key toggles between the alphanumeric and the navigation mode (see Hao - col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the keys (e.g., key #2, 4, 6, 8 in Fig. 4) are multifunction keys that can provide alphanumeric and navigation function in which the keys are able to switch or toggle between the alphanumeric and navigation mode. The combination of Hao and Andre fails to disclose the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface. However, the examiner maintains that the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface was well known in the art, as taught by Tso.

In the same field of endeavor, Tso discloses the feature of a key automatically switches which reads on the claimed "toggles" between the text and numeric mode which reads on the claimed "alphanumeric and the navigation mode" based upon data input during user interface (see col. 1, lines 16-22; col. 4, lines 3-22; col. 5, lines 24-30,47-50; col. 8, line 46 - col. 9, line 31; col. 13, line 10 - col. 14, line 2; col. 14, lines 10-48; col. 16, lines 51-58; Figs. 1-8, 11-12,16-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao, Andre, and Tso to have the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface, in order to automatically switch between modes for user data input, as taught by Tso.

Regarding **Claim 8**, the combination of Hao and Andre discloses of the feature wherein the at least one integral navigation and alphanumeric key toggles between the alphanumeric and the navigation mode (see Hao - col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the keys (e.g., key #2, 4, 6, 8 in Fig. 4) are multifunction keys that can provide alphanumeric and navigation function in which the keys are able to switch or toggle between the alphanumeric and navigation mode. The combination of Hao and Andre fails to disclose the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface. However, the examiner maintains that the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface was well known in the art, as taught by Tso.

Tso further discloses the feature of a key automatically switches which reads on the claimed “toggles” between the text and numeric mode which reads on the claimed “alphanumeric and the navigation mode” based upon data input during user interface (see col. 1, lines 16-22; col. 4, lines 3-22; col. 5, lines 24-30,47-50; col. 8, line 46 - col. 9, line 31; col. 13, line 10 - col. 14, line 2; col. 14, lines 10-48; col. 16, lines 51-58; Figs. 1-8, 11-12,16-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao, Andre, and Tso to have the feature of a key automatically toggles between the alphanumeric and the navigation mode based upon data input during user interface, in order to automatically switch between modes for user data input, as taught by Tso.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hao (US 6,437,709 B1) in view of Andre (US 5,950,809) as applied to claim 6 above, and further in view of Kraft et al. (hereinafter Kraft) (US 6,463,278 B2).

Regarding **Claim 11**, the combination of Hao and Andre teaches of manually toggling the combined alphanumeric and navigation keys between alphanumeric and navigation mode by using the control key which reads on the claimed "toggle key" (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the control key is a multifunction key to change key functions into navigation control mode for user data input. The combination of Hao and Andre fails to disclose automatically changing or toggling between modes. However, the examiner maintains that automatically changing or toggling between modes was well known in the art, as taught by Kraft.

Kraft further teaches of automatically changing or toggling between modes (see abstract; col. 1, lines 39-57; col. 6, lines 17-24, Fig. 2), where the phone sensor automatically changes modes based on the detected parameter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao, Andre, and Kraft to have the mobile phone automatically changing or toggling between modes.

The advantage of combining the teachings of Hao, Andre, and Kraft is for the CPU of the mobile to automatically detect the control parameters of the phone without having the user to manually change the operation mode (see Kraft - col. 6, lines 20-27).

Regarding **Claim 12**, the combination of Hao and Andre teaches of manually toggling the combined alphanumeric and navigation keys between alphanumeric and

navigation mode by using the control key which reads on the claimed “toggle key” (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the control key is a multifunction key to change key functions into alphanumeric modes of phone operation for user data input. The combination of Hao and Andre fails to disclose automatically changing or toggling between modes. However, the examiner maintains that automatically changing or toggling between modes was well known in the art, as taught by Kraft.

Kraft further teaches of automatically changing or toggling between modes (see abstract; col. 1, lines 39-57; col. 6, lines 17-24, Fig. 2), where the phone sensor automatically changes modes based on the detected parameter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao, Andre, and Kraft to have the mobile phone automatically changing or toggling between modes.

The advantage of combining the teachings of Hao, Andre, and Kraft is for the CPU of the mobile to automatically detect the control parameters of the phone without having the user to manually change the operation mode (see Kraft - col. 6, lines 20-27).

Regarding **Claim 13**, the combination of Hao and Andre teaches of manually toggling the combined alphanumeric and navigation keys between alphanumeric and navigation mode by using the control key which reads on the claimed “toggle key” (see col. 5, line 53 - col. 6, line 24; Figs. 4-15), where the control key is a multifunction key to change key functions between modes of phone operation. The combination of Hao and Andre fails to disclose automatically changing or toggling between modes. However, the examiner

Art Unit: 2686

maintains that automatically changing or toggling between modes was well known in the art, as taught by Kraft.

Kraft further teaches of automatically changing or toggling between modes (see abstract; col. 1, lines 39-57; col. 6, lines 17-24, Fig. 2), where the phone sensor automatically changes modes based on the detected parameter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hao, Andre, and Kraft to have the mobile phone automatically changing or toggling between modes.

The advantage of combining the teachings of Hao, Andre, and Kraft is for the CPU of the mobile to automatically detect the control parameters of the phone without having the user to manually change the operation mode (see Kraft - col. 6, lines 20-27).

Response to Arguments

3. Applicant's arguments with respect to claim 1-4,6-9,11-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Tomura et al. (US 6,771,992 B1) discloses a "Portable Telephone".
 - b. Thayer (US 6,529,186 B1) discloses a "Method And System For Index Finger Controlled Pointing Device Positioned On Home Row Keys".
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR
15 August 2004


LESTER G. KINCAID
PRIMARY EXAMINER
~~LESTER G. KINCAID~~
~~PRIMARY EXAMINER~~